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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,696	07/31/2003	Yu-Qi Wang		1612

23364 7590 11/29/2005

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EXAMINER

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/630,696	WANG, YU-QI	
	Examiner	Art Unit	
	Leonid Shapiro	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng et al. (US 6,917,695 B2) in view of Sayag (US 5,801,681).

Teng et al. teaches device See Col. 1, Lines 12-17), comprising a housing (See Fig. 20, item 308, Col. 13, Lines 29-36);

a first convex lens located upon the housing such that an object may be placed on the first convex lens (See Fig. 15, items 710, 735, Col. 17, Lines 15-18);

a light source within the housing arranged to project light on the first convex lens (See Fig. 15, items 712a-712c, Col. 17, Lines 25-29);

a sensor located within the housing for sensing light reflected from the object when the object is placed on the first convex lens (See Fig. 15, item 716, Col. 17, Lines 26-42);

a second convex lens located between the first convex lens and the sensor for focusing light reflected from the object onto the sensor (See Fig. 15, item 714, Col. 17, Lines 32-39);

wherein said first convex lens and said second convex lens are arranged such that when an object contacts the first convex lens, light projected by the light source and reflected by the object is clearly focused on and detected by the sensor

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through the second convex lens (See Fig. 15, item 710, 712, 714, 716, Col. 17, Lines 50-61 and Col. 6, Lines 54-67).

Teng et al. does not disclose a pointing device wherein when the object slides over the first convex lens, the sensor detects a new image position so as to generate a corresponding electronic signal for transmission to a computer system.

Sayag teaches a pointing device wherein when the object slides over the first convex lens, the sensor detects a new image position so as to generate a corresponding electronic signal for transmission to a computer system (See Fig. 1, items 100, 120, Col. 5, Lines 13-34).

It would have been obvious to one of ordinary skill in the art at the time of invention incorporate teaching of Sayag into Teng et al. system in order to effect movement of the display pointer with improved reliability (See Col. 2, Lines 8-13 in the Sayag reference).

As to claim 2, Sayag teaches electronic signal is arranged to move a computer cursor (See Fig. 1, items 100, 120, Col. 5, Lines 13-34)..

As to claim 3, Teng et al. teaches light beam evenly illuminating an entire surface of the first convex lens (See Fig. 15, items 710, 712, Col. 17, Lines 26-30).

As to claim 4, Sayag teaches the pointing device is build-in to a housing of a computer (See Fig. 13, item 1302, Col. 5, Lines 3-5).

As to claim 5, Sayag teaches the first convex lens is a biconvex lens (See Fig. 1, item 108, Col. 5, Line 23-25).

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As to claim 6, Teng et al. teaches the first convex lens is a single convex lens (See Fig. 15, items 710, 718, Col. 17, Line 50).

As to claim 7, Teng et al. teaches the first convex lens is located upon the top of the housing (See Fig. 15, items 710, 718, Col. 17, Lines 26-27).

As to claim 9, Teng et al. teaches the first convex lens is located upon a lateral side of the housing (See Fig. 20, item 318, Col. 13, Lines 42-44).

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teng et al. and Sayag as applied to claim 1 above, and further in view of Huang et al. (Pub. No.: US 2003/0098852 A1).

Teng et al. and Sayag do not disclose the first convex lens is located in front end of housing.

Huang et al. teaches the first convex lens is located in front end of housing (See Fig. 4B, item 13, paragraph 0031).

It would have been obvious to one of ordinary skill in the art at the time of invention incorporate teaching of Huang et al. into Sayag and Teng et al. system in order to improve efficiency (See paragraph 0008 in the Huang et al. reference).

Telephone Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LS
09.30.05

AMR A. AWAD
PRIMARY EXAMINER

